# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
GUSA LICENSEE, LLC	) ) )	File No. SES-LIC-20051122-01631 Call Sign: E050345
Applications to operate three new feeder link earth stations in Wasilla, Alaska using the 5 and 7 GHz frequency bands	)	File No. SES-LIC-20051122-01632 Call Sign: E050346
	) )	File No. SES-LIC-20051122-01633 Call Sign: E050347
	) ) )	

#### ORDER AND AUTHORIZATION

Adopted: January 4, 2007 Released: January 4, 2007

By the Chief, Satellite Division, International Bureau:

#### I. INTRODUCTION

1. By this order, we grant, in part, and deny, in part, three GUSA Licensee, LLC ("GUSA") applications¹ for authority to operate three earth station facilities in Wasilla, Alaska that will provide feeder link² service for its Big LEO³ Non-Geostationary Satellite Orbit ("NGSO") Mobile-Satellite Service⁴ ("MSS") System.⁵ We grant these applications insofar as they propose to operate the earth

<sup>&</sup>lt;sup>1</sup> The application was originally filed by Globalstar USA, LLC, which transferred its interest to GUSA Licensee, LLC by pro forma assignment. Letter to the FCC Secretary dated Aug. 21, 2006 from Josh L. Roland, Counsel for Globalstar LLC. In this order, we refer to both GUSA Licensee, LLC and its predecessor as GUSA.

<sup>&</sup>lt;sup>2</sup> The term "feeder link" refers to fixed-satellite service radio links carrying signals in both directions between a MSS satellite and an earth station at a fixed point. *See* 47 C.F.R. § 2.1. Feeder link earth stations that distribute information to, and receive information from, terrestrial telecommunication networks, *e.g.*, the public switched telephone network and the Internet, are generally known as gateways.

<sup>&</sup>lt;sup>3</sup> The term "Big LEO MSS" denotes mobile satellite service systems that transmit to mobile earth stations in the 1610-1626.5 MHz band.

<sup>&</sup>lt;sup>4</sup> MSS is a radiocommunication service between mobile earth stations and one or more satellites, or between satellites used by this service; or between mobile earth stations by means of one or more satellites. *See* 47 C.F.R. § 2.1. A satellite in geostationary-satellite orbit ("GSO") has a period of revolution that is equal to the period of rotation of the Earth about its axis and a circular orbit that lies generally in the plane of the Earth's equator. GSO satellites remain approximately fixed relative to a point on the Earth; a satellite in any other orbit is an NGSO satellite.

<sup>&</sup>lt;sup>5</sup> GUSA is authorized to provide MSS in the 1610-1626.5 MHz frequency band ("uplink") and the 2483.5-2500 MHz frequency band ("downlink"). *See* Loral/Qualcomm Partnership, L.P. for Authority to Construct, Launch and Operate Globalstar, a Low Earth Orbit Satellite System to Provide Mobile Satellite Services in the 1610-1626.5 MHz/2483.5-2500 MHz Bands, File Nos. 19-DSS-P-91(48), CSS-91-014 and 21-SAT-MISC-95, *Order and Authorization*, 10 FCC Rcd 2333 (1999), *Erratum*, 10 FCC Rcd 3926.

stations in the 5096-5250 MHz frequency band (Earth-to-space) and in the 6900-7025 MHz frequency band (space-to-Earth). We deny, however, GUSA's request to operate the earth stations in the 7025-7055 MHz frequency band (space-to-Earth) and its accompanying request for a waiver of the U.S. Table of Frequency Allocations ("Table of Allocations") for failure to provide good cause for a waiver. Specifically, as explained further below, the Commission has previously determined that NGSO MSS feeder link earth stations should not be allowed in the 7025-7055 MHz frequency band, and GUSA does not provide an adequate basis for revisiting that determination in this case. Grant of these applications, as conditioned, will permit GUSA to better serve the public by providing additional feeder link capacity.

## II. BACKGROUND

- 2. Allocations for feeder links for NGSO MSS in the 5-7 GHz Band. In the 2002 MSS Allocation Order, the Commission made new spectrum available on a co-primary basis to the Fixed-Satellite Service ("FSS")<sup>6</sup> to provide necessary feeder link spectrum for a number of commercial NGSO MSS systems. Specifically, the Commission allocated the 5091-5250 MHz<sup>7</sup> frequency band on a co-primary basis for FSS feeder uplinks and the 6700-7025 MHz frequency band on a co-primary basis for FSS feeder downlinks to support Big LEO and 2 GHz MSS systems.<sup>8</sup> In addition, the Commission "grandfathered" two satellite systems and their associated earth stations at three sites permitting them to use the 7025-7075 MHz band for feeder downlinks.<sup>9</sup> The Commission also adopted coordination procedures to enable NGSO MSS systems to use downlink feeder link spectrum while adequately protecting incumbent terrestrial services. The Commission subsequently denied a petition for reconsideration filed by GUSA requesting that the 6700-7025 MHz NGSO MSS feeder link band be extended to 6700-7075 MHz.<sup>10</sup>
- 3. Other Co-Primary Allocations in the 6-7 GHz Band. As explained in the 2002 MSS Allocation Order, the 6700-7075 MHz frequency band is also allocated on a co-primary basis to the Fixed Service (FS), while the 6875-7075 MHz band contains an additional co-primary allocation for the Mobile Service (MS). Pursuant to these MS and FS allocations, the 6875-7075 MHz band is now being used by the TV Broadcast Auxiliary Service ("BAS") and Cable Television Relay Service ("CARS"), including mobile television pickup ("TVPU") Stations for electronic newsgathering ("ENG"), intercity relay ("ICR"), studio-to-transmitter links ("STLs"), and remote event coverage. Finally, the Commission also noted that it has specified that FSS uplink spectrum within the 7025-7075 MHz frequency band is available for feeder links in the Satellite Digital Audio Radio Service ("DARS"). 12

<sup>&</sup>lt;sup>6</sup> FSS is a radiocommunication service between earth stations at given points and one or more satellites. *See* 47 C.F.R. § 2.1.

<sup>&</sup>lt;sup>7</sup> As GUSA's applications are consistent with the Table of Allocations with respect to the 5 GHz band and it provided the required coordination report, we do not detail here that portion of GUSA's application or the coprimary services in the 5 GHz band.

<sup>&</sup>lt;sup>8</sup> Amendment of Parts 2, 25, and 97 of the Commission's Rules with Regard to the Mobile-Satellite Service Above 1 GHz, ET Docket No. 98-142, FCC 02-23, *Report and Order*, 17 FCC Rcd 2658 (2002) (2002 MSS Allocation *R&O*). The Commission subsequently denied a petition for reconsideration filed by GUSA requesting that the 6700-7025 MHz NGSO MSS feeder link band be extended to 6700-7075 MHz. Amendment of Parts 2,25 and 97 of the Commission's Rules with Regard to the Mobile-Satellite Service Above 1 GHz, FCC 03-69, ET Docket No. 98-142, *Memorandum Opinion and Order*, 18 FCC Rcd. 6897 (2003)(2003 MSS Allocation Reconsideration Order).

<sup>&</sup>lt;sup>9</sup> *Id.* at 2675. GUSA's Clifton, TX earth station uses the 6875-7055 MHz band, GUSA's Finca Pascual, PR earth station uses the 6900-7055 MHz band, and ICO's Brewster, WA earth station uses the 6975-7075 MHz band.

<sup>&</sup>lt;sup>10</sup> 2003 MSS Allocation Reconsideration Order.

<sup>&</sup>lt;sup>11</sup> *Id.* at 2670.

<sup>&</sup>lt;sup>12</sup> *Id*.

4. *GUSA's Earth Station Applications*. In 2005, GUSA filed three earth station applications proposing to use the 5096-5250 MHz and 6900-7055 MHz frequency bands for feeder link operations for its Big Leo NGSO MSS system. In each application, GUSA requests a waiver of the Table of Allocations to allow it to utilize spectrum in the 7025-7055 MHz band that was reserved in the *2002 MSS Allocation Order* for use by the other services. In its applications, GUSA argues that because of the remote nature of the Wasilla location, use of this spectrum is unlikely to cause interference to BAS users operating on these frequencies. <sup>13</sup> Specifically, GUSA states that the proposed gateway is located more than 30 miles from the Anchorage metropolitan area and clear of any fixed use in the 6875-7055 MHz band and only mobile BAS users in the vicinity of Wasilla, Alaska would require coordination with GUSA. GUSA further indicates that it would attempt a local coordination as allowed by Section 74.638(d) of the Commission's rules<sup>14</sup> and accept any BAS interference it might receive at the Alaska gateway. GUSA also argues that its operational capacity at its new feeder link earth stations would be constrained without authority to operate in the 7025-7055 MHz frequency band. The applications were placed on public notice and no oppositions or other comments were filed with respect to these applications.<sup>15</sup>

## III. DISCUSSION

- 5. Conforming Request. GUSA requests to operate its FSS feeder link earth stations in the 5096-5250 MHz frequency band and the 6900-7025 MHz frequency band shared with other co-primary services. Accordingly, GUSA filed a Frequency Coordination and Interference Analysis Report ("Coordination Report"). After review of the application and the Coordination Report, we find that the proposed feeder link operations in these bands present no technical issues and that grant would be in the public interest.
- 6. Request for Waiver of the Table of Allocations. GUSA also requests to use the 7025-7055 MHz downlink frequency band that was limited to three "grandfathered" earth stations by the Commission in the 2002 MSS Allocation Order. In the 2003 MSS Allocation Reconsideration Order, the Commission rejected a petition for reconsideration by GUSA seeking to extend the NGSO MSS feeder downlink from 6700-7025 MHz to 6700-7075 MHz. Having failed to persuade the Commission in the context of the rulemaking, GUSA now seeks a waiver of the Table of Allocations to permit it to use non-grandfathered earth stations to receive transmissions in the 7025-7055 MHz band. <sup>17</sup> Section 1.3 of the

<sup>15</sup> Satellite Radio Applications Accepted for Filing, Satellite Communications Services, *Public Notice*, Report No. SES-00770 (rel. November 30, 2005).

<sup>&</sup>lt;sup>13</sup> This statement is found in each of GUSA's applications on page 1 of GUSA's Response to FCC Form 312, Question 35.

<sup>&</sup>lt;sup>14</sup> See 47 C.F.R. § 74.638(d).

<sup>&</sup>lt;sup>16</sup> For FSS earth station applicants proposing to communicate in frequency bands that are shared coequally with terrestrial radiocommunications services, the earth station applicant must include a Frequency Coordination and Interference Analysis Report that is not older than 6 months from the date the earth station application is filed. *See* 47 C.F.R. §§ 25.203(c)(3) and 101.103(d)(2)(xi).

<sup>&</sup>lt;sup>17</sup> GUSA presents here the same technical argument regarding the hard-wired aspect of its satellite system that were presented to the Commission in the rulemaking proceeding. Compare waiver request with GUSA *ex parte* filing, received on June 26, 2001 in the rulemaking proceeding. Our review of GUSA's arguments under the waiver standard should not lead to a different result on the policy issue previously addressed by the Commission. *See* Application for Review of the Denial of Vista Communications, Inc.'s Request for Waiver, *Memorandum Opinion and Order*, FCC 03-206, 18 FCC Rcd. 16,957 note 64 (2003) (citing *Turro v. FCC*, 859 F.2d 1498, 1500 (DC Cir. 1988)).

Commission's rules authorizes the Commission to waive its rules for "good cause shown." Waiver is appropriate only if special circumstances warrant a deviation from the general rule and such deviation would better serve the public interest than would strict adherence to the general rule. Generally, the Commission may grant a waiver of its rules in a particular case only if the relief requested would not undermine the policy objective of the rule in question and would otherwise serve the public interest.

- 7. GUSA's request for waiver of the Table of Allocations to operate its Alaska feeder link earth stations in the 7025-7055 MHz band in addition to the 6875-7025 MHz band is based on its concern that NGSO MSS systems, such as the GUSA system, may be constrained by a shortage of feeder downlink spectrum. At the time of the 2002 MSS Allocation Order, there were two Big LEO MSS system operators, including GUSA, and one 2 GHz MSS system operator with feeder link authority in the 6875-7025 MHz band. Subsequent to the 2002 MSS Allocation Order, the Commission cancelled another Big LEO authorization, now leaving only GUSA and the 2 GHz system operator with NGSO MSS feeder link authority in this band. The Commission found in the 2002 MSS Allocation Order that "325 megahertz of primary spectrum, along with 50 megahertz of primary spectrum limited to grandfathered systems, will accommodate the existing need for feeder downlink spectrum." When the Commission adopted this Order there were three operators with feeder links in these bands. GUSA has failed to persuade us that the same amount of spectrum is insufficient to accommodate two operators.
- 8. Further, while GUSA proposes to accept any interference that may result from BAS operations at the proposed Alaska site, it seeks to coordinate its use pursuant to Section 74.638(d). Such coordination would protect GUSA from interference from any BAS operations in the vicinity of Wasilla, Alaska. GUSA's request thus is not an unfettered agreement that it will accept any interference from BAS operations. Grant of such a request for the use of the 7025-7055 MHz band on a protected basis would be in direct opposition to the careful balance the Commission struck in the allocation order<sup>23</sup> that limited the spectrum above 7025 MHz to three grandfathered earth station locations to preserve sufficient channels for nationwide ENG use and not constrain future growth of mobile TVPU service, particularly as broadcasters transition to digital operations.

<sup>20</sup> See WAIT Radio, 418 F.2d at 1157; Fugro-Chance, Inc., Application for Blanket Authority to Construct and Operate a Private Network of Receive-Only Mobile Earth Stations, *Order and Authorization*, 10 FCC Rcd 2860 (para. 2) (1995) (authorizing non-conforming mobile-satellite service in the C-band). *See also* Motorola Satellite Communications, Inc., Application for Modification of License, *Order and Authorization*, 11 FCC Rcd 13952, 13956 (para. 11) (1996) (authorizing service to fixed terminals in bands allocated to the mobile-satellite service).

<sup>&</sup>lt;sup>18</sup> See Section 1.3 of the Commission's rules, 47 C.F.R. §1.3. See also WAIT Radio v. FCC, 418 F.2d 1153 (D.C. Cir. 1969) (WAIT Radio); Northeast Cellular Tel. Co. v. FCC, 897 F.2d 1166 (D.C. Cir. 1990) (Northeast Cellular).

<sup>&</sup>lt;sup>19</sup> See Northeast Cellular, 897 F.2d at 1166.

<sup>&</sup>lt;sup>21</sup> In the *2002 MSS Allocation Order*, the Commission also noted that, in addition to those two Big LEO and one 2 GHz MSS feeder link authorizations, a number of authorizations to use feeder link spectrum in the 7025-7055 MHz band were cancelled shortly before that Order was released. *2002 MSS Allocation Order*, 17 FCC Rcd at 2677 n.105.

<sup>&</sup>lt;sup>22</sup> 2002 MSS Allocation R&O, 17 FCC Rcd at 2676. At the time the Commission made this statement, only one of the systems authorized to operate 7 GHz feeder downlinks had been cancelled. *Id.* at 2677 n.105. All license cancellations are now final.

<sup>&</sup>lt;sup>23</sup> 2002 MSS Allocation R&O at para 39. In that order, the Commission also noted that "In addition to preserving sufficient channels for nationwide ENG use, this action is expected to assist in the digital television ("DTV") transition because broadcasters may have need for both analog and digital BAS operations during the DTV build-out." *Id* at note 103.

9. As the Commission did in rejecting GUSA's petition for reconsideration in the rulemaking proceeding, we recognize that GUSA utilizes a frequency plan that includes a direct "hard-wired" translation between service uplink frequencies (1610-1626.5 MHz) and feeder downlink frequencies (6875-7055 MHz). Thus, if we reject GUSA's waiver request and only authorize 6900-7025 MHz downlink frequency band for the three new earth stations, it will not be able to operate across the entire 1610-1626.5 MHz band, given the satellite's configuration and thus fewer user terminal uplink beams would be available for use.<sup>24</sup> The fact that this amount of capacity is less than GUSA would have preferred does not establish that special circumstances warranting a waiver of the Table of Frequency Allocations. This is particularly true given that the Commission rejected similar arguments in the context of the rulemaking proceeding. Moreover, as noted above, adherence to the rule in this case would better serve the public interest because it would allow existing and future operations of allocated services, most notably airborne use, <sup>25</sup> to utilize the 7025-7055 MHz band without any impediment from GUSA's nonconforming use. Consequently, we deny GUSA's request for waiver of the Table of Frequency Allocations and those portions of its pending applications seeking to use the 7025-7055 MHz band.

## IV. ORDERING CLAUSES

- 10. Accordingly, IT IS ORDERED that, pursuant to Sections 1, 4(i), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(f), 303(g), and 303(r), the earth station applications filed by GUSA USA LLC, File Nos. SES-LIC-20051122-01631 (Call Sign E050345), SES-LIC-20051122-01632 (Call Sign E050346), SES-LIC-20051122-01633 (Call Sign E050347), ARE GRANTED, IN PART, AND DENIED, IN PART to the extent provided above. Accordingly, the three earth stations are authorized to operate in the 5096-5250 MHz (Earth-to-space) frequency band and the 6900-7025 MHz (Space-to-Earth) frequency band.<sup>26</sup>
- 11. IT IS FURTHER ORDERED that GUSA's three requests for waiver of the U.S. Table of Frequency Allocations to operate in the 7025-7055 MHz frequency band ARE DENIED.
- 12. IT IS FURTHER ORDERED that GUSA is afforded thirty days from the date of release of this Order to decline these authorizations as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.
- 13. This *Order* is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon adoption.

FEDERAL COMMUNICATIONS COMMISSION

Robert G. Nelson Chief, Satellite Division

<sup>&</sup>lt;sup>24</sup> When the grandfathered earth stations are utilized, the satellite communicating with the earth station experiences no such inefficiency.

<sup>&</sup>lt;sup>25</sup> Airborne use of the allocations services is the most difficult to coordinate with NGSO systems. For example, coordination with TV news helicopters would be very difficult.

<sup>&</sup>lt;sup>26</sup> Consistent with Satellite Division practice, the Systems Analysis Branch will issue earth station authorizations incorporating this Order by reference and including standard conditions for earth stations of this type.